XXIII. Descriptions of some new species of Exotic Cetoniidae. By J. O. Westwood, M.A., F.L.S., &c.

[Read 6th July, 1874.]

Goliathus albo-pictus, fem., Bohemann, Ins. Caffr. Part ii. p. 10 (1857); Westw. Thes. Entom. pl. 1, fig. 2, &.

Goliathus Kirkianus, G. R. Gray, Proc. Zool. Soc. Lond. Jan. 26, 1864.

The female insect, figured in Pl. VII. fig. 1, being unique, we do not possess the means of its sexual identification as the female of the *Gol. albo-pictus*, although there can be

but little doubt that such is the case.

It is black, varied on the hind part of the head, pronotum and elytra with white markings. The head is thickly punctured, oval in front, with two impressions between the eyes bearing two small somewhat triangular white spots. The mandibles have the horny part slender (Pl. VII. fig. 1a). The maxilla (Pl. VII. fig. 1b) have the upper lobe horny, terminated by two obtuse teeth, or rather its apex is emarginate; the lower lobe forms a strong curved spine. The mentum (Pl. VII. fig. 1c) is not so broad as in the male, rounded at the sides, deeply notched in the produced centre of its anterior margin. The prothorax is sub-heptagonal, the middle of the anterior margin forming a small tubercle, the hind margin produced and rounded over the scutellum; the anterior half of the lateral margin diverges considerably from the head, but the posterior sides converge towards the humeral portion of the elytra; the middle of the disc has a deep impression, extending from the centre to the front tubercle; the disc is densely covered with punctures of large size, especially towards the posterior margin; down the centre of the depression is a slender white line; another short, conical extends on each side obliquely from the front tubercle; there is a moderately wide white mark parallel to the lateral margin, united at each end with a very slender one.

The scutellum is smooth, with a strongly impressed line on each side. The elytra are covered with very minute

punctures in the black portions, all the white markings being impunctate; these markings are very numerous and irregular; they are chiefly undulating and transverse on the disc, the outer margin of each and the apex, extending upwards along the suture, being broadly white. On the disc are to be observed faint traces of two broad longitudinal costs. The podex is densely covered with minute punctures. The body beneath is entirely black, the metasternum with a strong central impressed line, the abdominal segments convex; the legs short and strong, the anterior tibiae with three teeth, the four posterior ones with a sharp central spine in the middle of the outer edge, the inner edge fringed with black hair; the anterior tarsi are unusually long and slender.

Length 22 lines; width of shoulders of elytra 111

lines.

Habitat Limpopo. In Mus. Higgins.

Chalcothea auripes, Westw. (Pl. VII. fig. 2.)

Tota opalino-viridis, fere impunctata, capite postice, tibiis tarsisque aurco-cupreis; clypeo profunde bifido, medio lateribusque elevatis punctatis; prothorace angulis posticis prominulis, disco pone medium sulco profundo longitudinali impresso, lateribus crebre punctatis et marginatis; scutello in medio depresso; elytris latis, convexis, suturâ depressâ; tuberculo ordinario acuto, apice ipso necnon pygidio transverse aciculatis; mesosterno lineâ tenuissimâ nigrâ vix impresso, segmentis abdominalibus convexis lavibus, penultimo serie submarginali punctorum, apicali leviter punctato; pedibus elongatis, tibiis 4 posticis extus in medio inermibus.

Long. corp. lin. 17; lat. humer. elytrorum lin. 7½. Habitat Borneo. In Mus. D. Higgins.

Gymnetis subpunctata. (Pl. VII. fig. 5.)

Piceo-atra, velutina; capite integro punctatissimo, elytris suturâ costisque duabus parum elevatis, lateribus discoque prope suturam guttis nonnullis stramineis fasciâque tenui irregulari undulatâ subapicali ejusdem coloris; pedibus præsertim basi anticorum rufo-hirtis; metasterno, coxis posticis, et lateribus abdominis lutescentibus, nigropunctatis; prosterno acuminato deflexo, setoso; mesosterno parum porrecto (Pl. VII. fig. 5a).

Long. corp. lin. 10; lat. humer. elytr. lin. 5.

Habitat Ecuador. In Mus. Higgins.

Allorhina hypoglauca. (Pl. VII. fig. 6.)

Supra fulva opaca, nigro-punctata, subtus læte opalinoviridis, capite fœminæ inermi, clypei margine antico integro, supra viridi parum tincto, thoracis punctis nonnullis irregularibus minutis nigris; elytris subplanis, haud costatis, punctis plurimis parvis rotundis maculisque tribus lateralibus nigris, fasciâ transversâ paullo pallidiori indistinctâ mediâ, alterâque inter medium et apicem, apiceque ipso impunctatis; epimeris et apice supra detecto coxarum posticarum viridi-tinctis; pedibus nigris, femoribus opalino-viridibus: corpore subtus opalino-viridi, processu sternali serieque macularum in medio abdominis nigris.

Long. corp. lin. 12; lat. humer. elytr. lin. 6.

Habitat Nicaragua. In Mus. Hopeano Oxoniæ et Higgins.

Parachilia Bufo. (Pl. VII. fig. 7.)

Cetonia Bufo, Gory and Percheron in Silberm. Rev. Ent. iii. 129. Burmeister, Handb. d. Ent. iii. 558 (Parachilia Bufo).

Tota nigra, opaca, velutina, capite antice acute bifido, punctato, maxillis dense rufo-barbatis, prothorace leviter punctato, supra convexo, subquadrato, lateribus antice rotundatis, postice fere rectis, margine tenui levi laterali, postico ante scutellum fere recto; hoc fere impunctato, elytris pone humeros prothorace multo latioribus, prope scutellum depressis, postice sensim angustatis, nigris, leviter punctatis singuloque suturâ costisque duabus parum distinctis impunctatis; podice rugoso; mesosterno simplici haud porrecto, rotundato, metasterno abdomineque nitidis, illo sulco tenui medio longitudinali, hujus segmentis convexis serieque subapicali punctorum oblongorum, impressis; pedibus crassis, tibiis anticis extus tridentatis, posticis quatuor in medio extus spinâ unicâ armatis \$\psi\$.

Mas pedibus elongatis. Var. elytris obscure rufis. Long. corp. lin. $16\frac{1}{2}$; lat. humer. elytr. lin. 9.

Habitat Madagascar. In Mus. D. Higgins et Hopeano Oxon.

No figure having hitherto been published of this interesting species, I have added a description and figure of the female. The male of the nearly allied *P. Leroyi* of Coquerel is figured in the Annales of the French Entom. Society for 1859, pl. 7, f. 1.

Anatona alboguttata (Pl. VII. fig. 4), Burmeister, Handb. iii. p. 504.

Crassa, chalybeo-nigra, opaca, capitis clypeo attenuato angulis anticis extus porrectis, pronoto crebre punctato, marginibus lateralibus, lineolâ mediâ subhastatâ, cum duabus aliis discoidalibus irregularibus cretaceis; scutelli apice rotundato, maculâ ovali, epimeris etiam maculâ, elytrorum singulo maculis 7 vel 8 rotundis, pygidioque quatuor minoribus, omnibus cretaceis; dorso pronoti et elytrorum fere impunctato et striolis destituto, suturâ pone medium parum elevatâ, pronoto lateribus rotundatis antice angustatis, margine postico ante scutellum emarginato; pedibus mediocribus; tibiis anticis acute tridentatis, posticis 4 extus in medio 1-dentatis: corpore infra nigro, nitido, luteo-setoso, abdominis segmentis mediis in medio depressis; lateribus metasterni, coxarum posticarum et segmentorum abdominalium cretaceo-maculatis; processu sternali vix porrecto obtuse rotundo, serie transversâ setarum notato.

Long. corp. lin. 7¼; lat. humer. elytr. lin. 4. Habitat in India. In Mus. Higgins.

No figure has hitherto been published of this pretty species.

Glycyphana mediata, Westw. (Pl. VII. fig. 3.)

Nigra, pronoto elytrisque pieco-nigris, velutinis; capite nitido, elypeo elongato apice rotundato, margine antico parum elevato, punctato; vertice inter oculos transversim elevato; antennis pedibusque piceo-castaneis; pronoto transverso, lateribus rotundatis, angulis posticis rotundatis, margine postico ante scutellum parum emarginato, margine omni tenui aurantio, postico paullo latiori et in medio subinterrupto, dorso crebre cicatricoso-punctato; scutello elongato-trigono, apice acuto; elytris magis nigricantibus fascià dentatà medià, ad suturam interruptà, apicibusque aurantiis, singulo striâ suturali profundâ, punctisque fere indistinctis notatis; tibiis anticis acute tridentatis, posticis quatuor in medio extus dente acuto armatis: corpore infra piceo, vage punctato, setis luteis vestito; processu sternali vix porrecto, apice conico, abdomine convexo in individuo unico viso.

Long corp. lin. 8; lat. humer. elytr. lin. 4½. Habitat Borneo. In Mus. Higgins.

Diaphonia ruficornis, Westw. (Pl. VIII. fig. 6.)

E Diaphoniis typicis differt clavâ antennarum elongatâ. Brevis, crassa, convexa, piceo-nigra, elytris cyaneo- et purpureo-tinctis; nitida, valde rugosa, capitis clypeo integro subrotundato supra concavo, margine elevato, disco granuloso; occipite griseo-setoso; antennis rufis, articulo primo nigro, clavâ valde elongatâ; maxillis inermibus (Pl. VIII. fig. 6a), mento oblongo ovato, margine antico parum emarginato setoso, palpis labialibus elongatis; pronoto convexo, lateribus rotundatis, margine postico ante scutellum parum emarginato, dorso æneo-tincto, punctatissimo, lateribus scabris; scutello elongato-trigono, apice acuto; elytris scabris irregulariter punctatissimis, suturâ costisque duabus in singulo elevatis, apice rotundato; tuberculo ordinario, in quo costa desinent, parum distincto: corpore infra valde setoso, processu sternali haud porrecto, tibiis anticis extus 3-dentatis, dente basali multo minori, 4 posticis pone medium valde emarginatis, duabus posticis crassis angulo externo apicali extus producto et truncato.

Long. corp. lin. 7; lat. humer. elytr. lin. 4. Habitat in Australiâ. In Mus. Higgins. Obs.—Diaphoniæ rugosæ proxima.

Euryomia quadrimaculata, Westw. (Pl. VIII. fig. 8.)

Nigra, subtus luteo-setosa; capite nitido punctatissimo; elypeo oblongo angulis anticis rotundatis, margine in medio antico vix emarginato; pronoto lato, velutino, brunneo, margine omni flavido, lateribus rotundatis, margine postico supra scutellum parum rotundato-producto; scutello trigono, apice acuto; elytris latis, humeris rotundatis, velutinis, flavidis, singulo maculis duabus magnis brunneis, striâ suturali profundiori striisque nonnullis discoidalibus punctatis parum distinctis, pygidio granuloso setoso; tibiis anticis 3-dentatis, 4 posticis in medio extus 1-spinosis; processu sternali vix porrecto, lato, apice angulato, metasterno et segmentis convexis ventralibus rude punctatis.

Long. corp. lin. $5\frac{3}{4}$; lat. humer. elytr. lin. 3. Habitat Madagascar. In Mus. Higgins. Obs.—Euryomiæ argenteæ affinis.

Clinteria tricolorata. (Pl. VIII. fig. 4.)

Angusta, nigra, opaca, angulis anticis pronoti maculisque duabus magnis in medio laterali elytrorum binisque minoribus apicalibus cum duabus pygidii albis; angulis posticis pronoti et pygidio obscure rufis; clypei margine antico

acute emarginato, facie in medio elevatâ, vertice punctato, punctis posticis majoribus, maculis duabus parvis albis ad basin antennarum; pronoto punctato, angulis anticis maculâ ovali albo-cretaceâ, punctoque rotundo parvo subdiscoidali adjecto; elytris punctato-striatis, punctis semiovalibus aciculatis: corpore infra punctato glabro, metasterno utrinque maculâ magnâ albâ, maculâ minutâ in medio epimerarum, alterâque majori ad latera coxarum posticarum, segmentis duobus mediis abdominis maculâ parvâ laterali, pygidioque duabus, albis; segmentis mediis ventralibus longitudinaliter impressis; tibiis anticis maris tridentatis; processu metasternali elongato porrecto, apice parum recurvo; prosterno inermi.

Long. corp. lin. 7; lat. humer. elytr. lin. 3½.

Habitat in Indiâ. In Mus. Higgins.

Pachnoda hilaris, \(\text{Pl. VIII. fig. 2.} \)

Obscure viridis, velutina; scutello, elytris et pronoto fulvo-rufis, hoc maculis duabus oblongis discoidalibus viridibus; metasterno utrinque macula magna laterali, coxis posticis maculâ minutâ, abdomine maculis 16, quadruplici serie digestis, albis; capite viridi nitido, clypeo emarginato, ante apicem transverse impresso, vertice convexo; pronoto et scutello impunctatis, illo ante scutellum emarginato, trisinuato, elytris inter medium et suturam longitudinaliter punctato, striatis, lateribus magis irregulariter punctatis; podice fere impunctato, viridi, utrinque maculâ rufo-fulvâ notato: corpore infra nitido, metasterno utrinque et femoribus longitudinaliter aciculatis, abdominis segmentis basalibus leviter punctatis, convexis, duabus apicalibus crebre punctatissimis; pedibus brevibus, tibiis anticis extus tridentatis; quatuor posticis in medio angulatis, intus fulvo-hirtis.

Long. corp. lin. 16½; lat. humer. elytr. lin. 8. Habitat Sierra Leone. In Mus. D. Higgins et Parry.

Anochilia (Pygora) conjuncta, Gory and Percheron, Descr. de n. Esp. Cetoines de Madag. Silberm. Rev. Ent. iii. 125. (Pl. VIII. fig. 5.)

Nigra, nitida, elytrorum disco castaneo-rufis, maculis sex rotundis albis apicalibus, pygidio duabus majoribus; capite punctato, elypeo porrecto quadrato, antice medio parum emarginato, angulis anticis rotundatis; pronoto fere lævi subhexagono, lateribus in medio angulatis, pone medium fere rectis parallelis, scutello conico apice acuto; elytris

nitidis, humeris valde prominentibus, lateribus pone humeros profunde emarginatis, intus humeros deplanatis; inter suturam et medium disci profunde sulcato-striatis; basi apice et regione suturali nigris, partibus discoidali et externa castaneo-rufis; tuberculis duobus ordinariis subapicalibus fere obliteratis; pedibus longis, piceo-castaneis: corpore infra nigro, albido-variegato, lateribus prosterni bimaculatis; mesosterno utrinque bimaculato, maculis duabus transversis metasterni lateribus, segmentis ventralibus abdominis convexis in medio vix depressis; maculis transversis lateralibus, alterisque subquadratis mediis, albidis; processu sternali vix porrecto, apice rotundato setoso; maxillis inermibus (Pl. VIII. fig. 5a), mento apice emarginato, emarginaturâ in medio acutâ (Pl. VIII. fig. 5b); tibiis anticis bidentatis; tibiis 4 posticis ante apicem oblique emarginatis, tarsorum articulis intermediis latioribus apice spinosis, calcari interno pedum 2 posticorum elongato, apice incurvo subclavato, unguibus longis.

Long. corp. lin. 7; lat. humer. elytr. lin. 3. Habitat Madagascar. In Mus. Higgins.

The description of this species given by Messrs. Gory and Percheron is so short and unsatisfactory that I have considered it useful to publish a figure and full description of it.

Anochilia marginicollis, Westw. (Pl. VIII. fig. 7.)

Nigra, nitida, lateribus pronoti et coxarum posticarum, humeris elytrorum plagisque duabus discoidalibus, aurantio-rufis; capite punctato, clypeo profunde inciso, angulis anticis productis acutis; lateribus profunde canaliculatis; pronoto glabro dorso parum punctato, lateribus in medio angulatis, tenue marginatis, parte postica fere rectâ parallelâ, margine postico fere recto, ante scutellum vix emarginato, scutello longo subtrigono, apice vix acuto; elytris dorso planis, lævibus, nitidis, humeris tenue fulvorufis, lateribus pone humeros profunde emarginatis; singulo plagâ magnâ subovali ejusdem coloris notato; pygidio scabro: corpore infra cum pedibus nigris nitidis, processu sternali haud producto, obtuso, lateribus metasterni rude punctatis, abdominis segmentis ventralibus convexis, singulo serie mediâ transversâ punctorum notato, tibiis anticis tridentatis; 4 posticis in medio extus parum angulatis vix spinâ armatis.

Long. corp. lin. 12½; lat. humer. elytr. lin. 6. Habitat Madagascar. In Mus. Hopeano Oxoniæ et

Higgins.

I should have considered this to be the *Cetonia cingulata*, Gory and Perch. (Silberm. Rev. Ent. iii. p. 129), but that these authors describe their species as having the pronotum lobed and the sternum as short and triangular.

Stalagmosoma quadriguttata, Westw. (Pl. VIII. fig. 1.)

Angusta, capite nigro, nitido, clypeo parum emarginato, pronoto carneo-fulvo velutino, maculis duabus subtrigonis nigris, scutello acute triangulari cum elytris viridibus velutinis, his per paria striato-punctatis, singulo guttis duabus subapicalibus niveis; pygidio piceo-rufo, pedibus corporeque subtus nigris nitidis; capite punctato, punctis verticis majoribus; pronoto subtrigono, lateribus et margine postico rotundatis, disco sub lente crebre punctato, tibiis anticis tridentatis, tibiis quatuor posticis in medio parum angulatis; segmentis ventralibus ad latera puncto minuto albo notatis.

Long. corp. lin. 6; lat. humer. elytr. lin. 2²/₃. Habitat in Angolâ (Rogers). In Mus. Higgins.

The anterior coxe, the sternal process, and the hind edge of the fore femora are clothed with rows of short luteous hairs; the sternal process itself is not porrected and transverse; the sides of the metasternum and posterior coxe are marked with numerous curved strike arranged semicircularly. The abdomen beneath is very glossy, convex in the unique individual described; slightly punctured; the pygidium is marked with shallow circular cicatricose punctures; the strike of the clytra are arranged in pairs, and are formed of clongated, slender and often longitudinally confluent punctures, forming, especially beyond the middle of the disc, uninterrupted, slender, black lines.

Stulagmosoma scalaris, Gory and Perch. Ceton. p. 249, pl. 47, f. 3. (Pl. VIII. fig. 3.)

Var.—St. nigriceps, Westw.

Angusta, supra saturate viridis, velutina; capite, corpore infra, pedibusque nigris, pronoti margine omni tenui fulvo, elytrorum humeris, fascia lata submedia, lineola tenuissima obliqua sub-basali, alterisque irregularibus inter fasciam et apicem fulvis; pygidio corporeque subtus nigris; segmentorum abdominalium margine postico utrinque tenue albido; capite subnitido, crebre punctato,

clypeo emarginato, pronoti lateribus et basi elytrorum varioloso haud profunde punctatis, elytris striato-subpunctatis: corpore infra glabro, segmentis ventralibus basi et apice denticulato-punctatis.

Long. corp. lin. 6; lat. humer. elytr. lin. $2\frac{3}{4}$.

Habitat in Africâ occidentali tropicali. In Mus. Higgins.

This prettily marked species has the elytra curiously longitudinally striated, the strike being arranged in pairs on each side of the rows of fine punctures, and with the exception of the sutural curving inwards and terminating at about two-thirds of the length of the elytra, the apical portion of which is slightly variolose. The scutellum is rather long, narrow and obtuse at the tip; the anterior tibize are tridentate, the basal tooth nearly obsolete; the four posterior tibize are angulated in the middle of the outer edge rather than spined; the sternal process is not porrected, it is rather dilated in front and rounded.

The abdominal segments in the unique specimen de-

scribed were convex.

DESCRIPTION OF THE PLATES.

- Pl. VII. fig. 1. Goliathus albo-pictus? \$\daggeq\$; \$1a\$, mandible, \$1b\$, maxilla, \$1c\$, mentum, \$1d\$, mesosternum.
 - ,, fig. 2. Chalcothea auripes; 2a, mesosternum.
 - ,, fig. 3. Glycyphana mediata; 3a, 3b, mesosternum.
 - ,, fig. 4. Anatona alboguttata; 4a, mesosternum.
 - ,, fig. 5. Gymnetis subpunctata; 5a, pro- and meso-sterna.
 - , fig. 6. Allorhina hypoglauca.
 - " fig. 7. Parachilia Bufo; 7a, 7b, mesosternum.
- Pl. VIII. fig. 1. Stalagmosoma 4-guttata; 1a, elypens, 1b, 1c, mesosternum.
 - fig. 2. Pachnoda hilaris; Q 2a, mososternum.
 - ng. 3. Stalagmosoma scalaris; 3a, 3b, mesosternum.
 - fig. 4. Clinteria tricolorata; 4a, clypeus, 4b, 4c, mesosternum.
 - " fig. 5. Anochilia conjuncta; 5a, maxilla, 5b, mentum, 5c, mesosternum.
 - ,, fig. 6. Diaphonia ruficornis; 6a, maxilla, 6b, mentum.
 - fig. 7. Anochilia marginicollis; 7a, mesosternum.
 - " fig. 8. Euryomia 4-maculata; 8a, clypeus, 8b, 8c, mesosternum.